What is claimed is:

1. A method for choosing components or subsystems for a plurality of generic descriptions in a system design in compliance with one or more system constraints, wherein the generic descriptions represent components or subsystems in the system design, the method comprising:

choosing a first generic description and a second generic description from the plurality of generic descriptions;

querying a database of objects for finding potential components or subsystems for the first generic description;

receiving a first answer set from the database of objects, where the first answer set is comprised of at least one component or subsystem candidate for the first generic description;

querying the database of objects for finding potential components or subsystems for the second generic description;

receiving a second answer set from the database of objects, where the second answer set is comprised of at least one component or subsystem candidate for the second generic description;

testing at least one of the combinations of component or subsystem candidates from the first and second answer sets against one or more predefined system constraints; and

determining at least one solution set, where each solution set is one of the combinations of component or subsystem candidates which best complies with the one or more predefined system constraints.

2. The method for choosing components or subsystems for a plurality of generic descriptions in a system design, from claim 1, wherein the generic descriptions are blocks of a block diagram.

3. The method for choosing components or subsystems for a plurality of generic descriptions in a system design, from claim 1, wherein at least one of the one or more predefined system constraints depends on the cumulative contribution of each of the component or subsystem candidates in the combination.

4. A method for verifying whether components or subsystems for a plurality of generic descriptions in a system comply with one or more system constraints, wherein the generic descriptions represent components or subsystems of the system, the method comprising:

choosing a first generic description and a second generic description from the plurality of generic descriptions;

querying a database of objects for finding potential components or subsystems for the first generic description;

receiving a first answer set from the database of objects, where the first answer set is comprised of at least one component or subsystem candidate for the first generic description;

assigning a first candidate object from the first answer set to the first generic description;

querying the database of objects for finding potential components or subsystems for the second generic description;

receiving a second answer set from the database of objects, where the second answer set is comprised of at least one component or subsystem candidate for the second generic description;

assigning a second candidate object from the second answer set to the second generic description; and

testing whether the first and second candidate objects comply with at least one predefined system constraint.

5. The method for choosing components or subsystems for a plurality of generic descriptions in a system design, from claim 4, wherein the generic descriptions are blocks of a block diagram.

6. The method for choosing components or subsystems for a plurality of generic descriptions in a system design, from claim 4, wherein at least one of the one or more predefined system constraints depends on the cumulative contribution of each of the component or subsystem candidates in the combination.